

**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of)	PS Docket No. 06-229
)	
)	
Request by the Adams County)	
Communications Center for Waiver of))	
the Commission's Rules to Allow)	
Establishment of a 700 MHz		
Interoperable Mobile Public Safety)	
Broadband Network		

REQUEST FOR WAIVER

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I. SUMMARY OF REQUEST

Pursuant to Section 47 C.F.R. § 1.925(b)(3), the Adams County Communications Center (ADCOM), respectfully submits this Request for Waiver of the Commission's rules to allow the Denver International Airport (DIA) and the first responders of Adams County Colorado to use the public safety broadband spectrum in the 700 MHz band to deploy a regional, mobile, interoperable public safety broadband network. The Adams County regional public safety broadband network would be compatible with national standards and fully interoperable with a nationwide network or other regional networks meeting national standards. ADCOM is poised to begin design and phased construction of an interoperable public safety long term evolution (LTE) broadband data network in the Adams County Colorado Region (Region). Granting the requested waiver would allow ADCOM, in conjunction with DIA, to move ahead with the design and construction of the public safety broadband data network serving the fifth most populace county in Colorado and the Denver International Airport, such action strongly serves the public interest and supports the Commission's goals. Accordingly, ADCOM seeks a waiver of the Commission's rules to grant them the authorization to use the public safety broadband 700 MHz spectrum (763-768/793-798 MHz). This waiver would enable ADCOM, to immediately begin a phased implementation of a public safety wireless broadband network which will begin serving first responders within one year from the granting of the waiver. Upon approval of the waiver request ADCOM would take the

necessary steps to enter into an appropriate agreement with the Public Safety Spectrum Trust (PSST), as the current Public Safety Broadband Licensee (PSBL) for a sub-license of the public safety spectrum to use in the Region.

II. BACKGROUND

ADCOM and DIA (the parties) are collaborating to design and construct an interoperable wireless broadband network. The Parties are members of the Colorado North Central All Hazards/Denver UASI Region (NCR/UASI), a regional cooperation organization formed in 2002. The Parties provide critical public safety services to the residents of Adams County as well as services to the passengers that travel through DIA, interoperable communications are an integral part of providing these services. This project is intended as a pilot program to demonstrate the viability of LTE as a broadband interoperable wireless data platform to provide emergency service and day-to-day communications for public safety, as well as public service entities and critical infrastructure partners throughout Colorado. The Parties involved in this pilot program are dedicated to regional cooperation in constructing and operating interoperable public safety infrastructure to provide the highest feasible level of prevention, protection, response and recovery ranging from daily public safety services to acts of terrorism and/or other catastrophic events.

Colorado public safety agencies have a strong history of promoting interoperability. This can be demonstrated by their implementation of a statewide interoperable Project 25 digital trunked land mobile radio system for voice communications serving State, Tribal, and Local Government agencies through sharing sites owned and operated by the various levels of users.

Colorado's public safety agencies are also currently in the process of implementing an effective and efficient information sharing project known as COPLINK. COPLINK is an automated information sharing program which will provide a significant regional and statewide information collection, analysis and sharing capacity. Once implemented, the COPLINK program will include: inmate descriptors; investigative leads; current case data; cold case data; crime analysis information; crime trends/patterns; suspect descriptors; and actionable intelligence. All of this information will be available for immediate use and exchange by Colorado's public safety professionals. Information

sharing programs such as this are one of the driving factors toward constructing an interoperable public safety broadband wireless data network.

A. Adams County Communications Center (ADCOM)

ADCOM is the primary Public Safety Answering Point (PSAP) for Adams County Colorado. ADCOM had 467,659 calls for service in 2008 resulting in over 800,000 actual transactions accomplished by the communications center. ADCOM dispatches public safety calls for the following agencies within Adams County: Adams County Sheriff, Bennett Fire Rescue, Brighton Police, Commerce City Police, Greater Brighton Fire Protection District, North Metro Fire Rescue, North Washington Fire Protection District, Northglenn Police, Sable-Altura Fire Protection District, South Adams Fire Protection District, Southwest Adams County Fire Rescue, and Strasburg Fire Protection District.

ADCOM has already invested heavily in infrastructure investments taking advantage of the 700MHz narrowband spectrum made available to public safety users to construct the first interoperable 700 MHz Project 25 simulcast cell system in Colorado supporting multiple operational requirements. ADCOM intends to leverage these investments in the build out of the wireless broadband data network.

B. Denver International Airport (DIA)

The Denver International Airport is by land size at 53 square miles (140 km²), the largest international airport in the United States, and the third largest international airport in the world. In 2008, Denver International Airport was the tenth busiest airport in the world by passenger traffic with 51,245,334 passengers. It was also the fifth busiest airport in the world by aircraft movements with 625,884 movements. The 33,000 acres (52 sq mi; 130 km²) of land occupied by the airport is surrounded by Adams County. The property for the airport was transferred from Adams County to Denver after a public vote in the 1989 special election.

C. Project Scope

The Parties will take a multi-discipline approach to network usage, allowing emergency and day-to-day communications for public safety, as well as public service entities and critical infrastructure partners. The existing assets available for the program include sites, towers, backhaul, power systems, infrastructure, and personnel owned by

ADCOM or by DIA. Should the waiver be granted, the Parties have the ability to utilize the 10 MHz of public safety broadband spectrum to supplement their existing interoperable voice radio networks, and to deploy an interoperable broadband data network extending not only to the urban area users, but also to the rural areas of Adams County.

Funding for the infrastructure would come from initial investments from both ADCOM and DIA. The Parties are also open to entering into some form of regional partnership, if necessary, to assist in financing and sustaining the project as well as for future expansion. The success and effectiveness of this project hinges on the ability to provide affordable, prioritized wireless broadband data service to the region's first responders, infrastructure partners and supporting agencies. Current usage of commercial broadband wireless networks doesn't provide countywide coverage, has scheduled maintenance downtimes that are inconvenient to public safety users, is expensive for the agencies and has showed more delays with the advent of increased private consumer web application usage. Use of the 700MHz public safety broadband spectrum for an interoperable system that incorporates local operational control is a critical need for the Parties.

D. Relevant Commission Actions

In the *Second Report and Order*,¹² the Commission adopted rules that would establish a public-private partnership to control the upper portions of the 698-806 MHz band ("700 MHz Band"). The rules provided that the winning bidder of the commercial license in the Upper 700 MHz D Block (758- 763/788-793 MHz) ("D Block") would enter into a public-private partnership with the nationwide licensee of the public safety broadband spectrum (763-768/793-798 MHz) ("Public Safety Broadband Licensee") to construct a nationwide broadband network, which would share both the commercial D Block and public safety spectrum. The Commission concluded that the public-private partnership would serve its objective "to maximize public safety access to interoperable, broadband spectrum in the 700 MHz Band, and to foster and promote the development and deployment of advanced broadband applications using modern, IP-based system

¹ Service Rules for the 698-746, 747-762 and 777-792 MHz Bands, WT Docket No. 06-150, *Second Report and Order*, 22 FCC Rcd 15289 (2007) (*Second Report and Order*) recon. pending.

architecture.”² In particular, the Commission found that this approach would address “the most significant obstacle to constructing a public safety network – the limited availability of public funding” and would provide “the most practical means of speeding deployment” of the desired nationwide, interoperable public safety broadband network.³ Thus, two of the Commission’s key goals in adopting the public-private partnership were overcoming financial hurdles and enabling public safety agencies to gain the considerable benefits of a broadband network as quickly as possible.⁴

In Auction 73, the auction of commercial 700 MHz licenses that concluded March 18, 2008, bidding for the D Block license did not meet the applicable reserve price of \$1.33 billion. Pursuant to the Commission’s rules, there was no winning bid for that license. The Commission has since proposed rules that would maintain the public-private partnership and re-auction the D Block with a lowered reserve price and reduced build out and service requirements.⁵

Notably, the Commission has proposed to relax its requirement that the winning bidder commit to a single nationwide network and has proposed to allow bids for regional networks in the belief that the goal of nationwide interoperability can still be achieved through roaming and other interoperability requirements.⁶ The Commission now recognizes that regional networks can be fully compatible with the goal of nationwide interoperability. In addition, the Commission recognizes that regional networks could offer significant benefits, such as ensuring that public safety communications are “tailored to meet unique local needs in particular geographic areas.”⁷ As the Commission explained in the *Third Further Notice*, a regional licensee could “take into account regional differences in terrain and public safety needs in determining how to set up and

² *Id.*, ¶ 396

³ *Id.*

⁴ The Commission has repeatedly noted the many potential benefits of broadband service to public safety, including: allowing police officers to exchange mug shots, fingerprints, photographic identification, and enforcement records; allowing firefighters to have access to floor and building plans and real-time medical information; providing high resolution photographs and real-time video monitoring of crime scenes to incident command centers. See, e.g., Service Rules for the 698-746, 747-762 and 777-792 MHz Bands, WT Docket No. 06-150, Third Further Notice of Proposed Rulemaking, 23 FCC Rcd 14301 (2008) (Third Further Notice), ¶ 51 and fn. 98.

⁵ See generally *Third Further Notice*.

⁶ *Third Further Notice*, ¶¶ 65, 70.

⁷ *Id.*, ¶ 71.

operate the system, which could be more cost effective in certain respects and better suited to regional needs than a one-size-fits-all system.”⁸

E. Uncertainty Regarding the Commission's Plan

In light of the failure of Auction 73 to produce a winning bidder, the uncertainty surrounding the 700 MHz public safety spectrum is a major roadblock to the Adams County first responder agencies’ and DIA’s urgent desire and need to build and operate a public safety broadband network now. Metropolitan areas such as Adams County cannot afford to wait ten to fifteen years for a nationwide carrier to build this network with the probability of coverage being limited to the urban area of the county. ADCOM and DIA believe that, through a sublicense arrangement with the PSBL, a regional network for Adams County first responders and DIA could be built in the near term. Similar to their voice radio system, ADCOM would build the network prioritized for public safety use, but also allow multi-discipline users on the network, incorporating other government services including transportation, public service, and critical infrastructure users, to the maximum extent the rules allow. ADCOM would take a phased approach for network construction, focusing on the core urban areas and coverage along major roadways first, with phased network expansion throughout the rural areas of Adams County and then to neighboring public safety jurisdictions. ADCOM and DIA will ensure that the selected vendor (or vendors) constructs a network that meets evolving regional and national interoperability requirements throughout all phases of the network deployment.

III. THE COMMISSION SHOULD GRANT THE REQUESTED WAIVER TO ALLOW ADCOM AND DIA TO CARRY OUT ITS PLANS TO BUILD AN INTEROPERABLE BROADBAND DATA NETWORK FOR PUBLIC SAFETY USERS.

A. Applicable Standard

To obtain a waiver of the Commission’s rules, a petitioner must demonstrate either that: (i) the underlying purpose of the rule(s) would not be served or would be frustrated by application to the present case, and that a grant of the waiver would be in the public interest; or (ii) in view of unique or unusual factual circumstances of the instant case, application of the rule(s) would be inequitable, unduly burdensome, or

⁸ *Id.*

contrary to the public interest, or the applicant has no reasonable alternative.⁹ An applicant seeking a waiver faces a high hurdle and must plead with particularity the facts and circumstances that warrant a waiver.¹⁰ Although a successful waiver petition needs to satisfy only one of the two tests, ADCOM will demonstrate that this request satisfies both tests.

B. Depriving ADCOM of Spectrum that It Needs for Its Interoperable Voice and Broadband Data Network Would Not Serve the Commission's Goals and Would Frustrate the Public Interest

Under the first test, the waiver request should be granted if: (a) denying ADCOM the use of the broadband spectrum, in the hope that a national public-private partnership plan will succeed, would not serve the underlying purposes of the Commission's plan, and (b) granting the waiver would be in the public interest. The waiver request easily meets both requirements. As shown above, the underlying purposes of the Commission's plans are to overcome the lack of funding for public safety broadband networks, to speed their deployment, and to provide for interoperability across the country. The Commission is concerned that a lack of appropriated funding sources will prevent the spectrum from ever being utilized. And recognizing the enormous benefits of wireless broadband services for first responders, the Commission wisely wishes to have public safety broadband networks available for use as quickly as possible. These goals drove the Commission to adopt a national public-private partnership approach under which a single commercial provider would build a nationwide network to be shared by public safety and commercial users. With the failure of Auction 73 and the uncertainties regarding the Commission's plan that have been aired by key stakeholders, it is unclear whether the Commission's current plan will serve its goals. Whether or not the Commission revamps its general approach, it is clear that, with respect to Adams County Colorado Region, the current plan does not serve the Commission's purposes or the needs of Adams County. The Adams County Region, the fifth most populace county in Colorado and the Denver International Airport, the tenth busiest airport in the world, are committed to deploying a state-of-the-art interoperable voice and data network. In

⁹ 47 C.F.R. § 1.925(b)(3).

¹⁰ *WAIT Radio v. FCC*, 413 F.2d 1153, 1157 (D.C. Cir. 1969), *aff'd*, 459 F.2d 1203 (1973), *cert. denied*, 409 U.S. 1027 (1972) (citing *Rio Grande Family Radio Fellowship, Inc. v. FCC*, 406 F.2d 664 (D.C. Cir. 1968)).

addition, cost savings will be realized by several of the Region's agencies with the discontinuance of recurring cellular data charges currently paid monthly to private service providers. ADCOM and DIA have secured the necessary funding to build the broadband data network. Were the Commission to deny the waiver, the Commission would frustrate its articulated goals. Instead of obtaining the benefits of a broadband network in the next few years, the Adams County Region of Colorado would have to wait an unknown period of time, possibly a decade or longer, for a commercial provider to build out a network that may be neither cost effective nor adequate to meet public safety requirements. Granting the waiver would unequivocally serve the public interest. Above all, 467,659 Adams County Residents as well as 51,245,334 DIA passengers would benefit from the enhanced abilities of first responders to prevent and respond to all types of disasters. Critical first responder tools, such as instant access to criminal databases for suspect information, improved situational awareness using video technologies, and real time tracking of assets, firefighters and resources, would be available throughout the region.

For example, utilizing the existing interoperable statewide voice network and a shared broadband data network, a battalion chief at an incident scene could communicate directly with a power utility worker, while downloading critical building floor plan information, and uploading video to Incident Command. A police commander could communicate with mutual aid partners, such as the state patrol, or federal partners, to secure perimeters and effectively deploy resources. The public interest benefits would extend beyond the Adams County Region. The nation's homeland security would be improved, as a region with DIA as potential terrorist target; first responders would be better prepared. The Parties also recognize and support the goal of nationwide interoperability. As the Commission recognized in its *Third Further Notice*, a regional network can be made fully compatible with this goal. The Parties will wholeheartedly support efforts to integrate a regionally-constructed network with a national Shared Wireless Broadband Network (SWBN). The participating agencies have been leaders in recognizing the importance of interoperability to regional catastrophic planning. As we prepare for possible catastrophic events, the public safety agencies in Adams County have emphasized the need for interoperability and network sharing between first

responders from all over the nation. To that point, the participating agencies support the concept of national roaming to ensure nationwide interoperability.

C. Given the Particular Circumstances in Adams County, Depriving ADCOM and DIA of Spectrum for Its Interoperable Broadband Network Would Be Contrary to the Public Interest

Under the second test, the waiver request should be granted if, in light of the Adams County region's unique or unusual circumstances, depriving the region of spectrum that it needs for an interoperable broadband network would be contrary to the public interest. The request readily meets this standard. The Adams County region desperately needs to move ahead with its interoperable broadband network; as a result, this opportunity will pass if the members of ADCOM and DIA are not granted access to the public safety broadband spectrum soon. Unlike most other cities or regions, ADCOM and DIA have a viable mechanism to implement a broadband network in the next few years without the need for a national model. For all the reasons set forth in the previous section, the public interest would not be served by preventing the Region from taking advantage of this unusual opportunity. The second test is also met if the requesting party demonstrates that it has no reasonable alternative to seeking a waiver. The ADCOM request also satisfies this standard. The public safety broadband spectrum is the Region's only reasonable option for broadband communications. Previously, spectrum allocation to public safety has been fragmented throughout the frequency ranges, and has only been made available for voice communications. Further, the 4.9 GHz spectrum is not adequate for large scale, wide area deployments, as its propagation characteristics require significant investment in infrastructure. All other potential spectrum options, including 2.4 GHz Wi-Fi and television white space,¹¹ do not allow for licensing, rendering systems susceptible to interference and thus unacceptable for public safety use. The 700MHz broadband spectrum is the only viable solution for a cost effective, regional wireless broadband system.

IV. CONCLUSION

For the reasons set forth above, ADCOM requests that the Commission grant a waiver that would allow ADCOM and DIA to take advantage of a unique opportunity to

¹¹ Unlicensed Operation in the TV Broadcast Bands, ET Docket No. 04-186, *Second Report and Order and Memorandum Opinion and Order*, rel. Nov. 4, 2008.

construct an interoperable wireless broadband network while funding is available. Though it is the intention for public safety representatives, through Congressional action, to seek complete licensing rights on both the D-Block and Public Safety Spectrum (758-768/788- 798MHz), ADCOM and DIA realize that the FCC currently has authority to grant a waiver for the ten MHz of Public Safety Broadband Spectrum currently licensed to the PSST. To prevent this opportunity from passing, ADCOM and DIA respectfully request that the Commission act on this petition promptly, so that the Region and the nation can gain all of the public interest benefits enumerated in this request.

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Respectfully submitted,



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